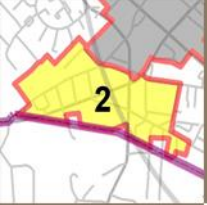


## **10. Utilities & Environment**



## South Washington Street Corridor Planning Opportunity Area 2

### Utilities

Public utilities include water and sanitary sewer infrastructure. An increase in development may necessitate an increase in capacity. The City's Department of Public Utilities may provide recommendations on necessary improvements as development occurs. The following sections describe the current conditions of public utilities in the South Washington Street Planning Opportunity Area (POA). The coordination of various Public Utilities projects such as sanitary sewer or water improvements with roadway and streetscape improvements can be more cost efficient overall.

#### Water

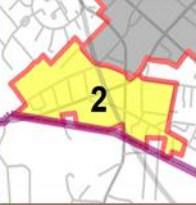
Water service to the South Washington Street POA is provided by the City of Falls Church Department of Public Utilities. Currently, there is a 16" diameter water main running along Hillwood Avenue from the eastern border of the South Washington Street POA and continuing north along Douglass Avenue and then west along Fairfax Street. There are 12" water mains running the length of South Washington Street, along Hillwood Avenue from the eastern border of South Washington Street to Annandale Road, and along Annandale Road from the southern border with Fairfax County to the main on South Washington Street. Six-inch water mains run the length of South Maple Avenue within the South Washington Street POA, along Shirley and

Gibson Streets, and along Tinner Hill and Wallace Streets between South Washington Street and South Maple Avenue. Six-inch mains are also present along Douglass Avenue, Fairfax Street, and Liberty Avenue. There are numerous four-inch water mains that serve various properties throughout the South Washington Street POA.

There are 17 fire hydrants within the South Washington Street POA. Hydrants are connected to water mains with six-inch water lines, and at least one hydrant is located on each block.

#### Sanitary Sewer

Sewer lines within the South Washington Street POA are generally located within street right-of-ways (ROW). Sewer lines in the South Washington Street POA are generally eight to ten inches in diameter and run along major roads. The only roadways that do not have sanitary sewer lines within the ROW are Wallace Street, Tinner Hill Street between South Washington Street and South Maple Avenue, and Hunton Avenue.



## Public Works

The Department of Public Works oversees the maintenance and improvement of stormwater and streetscape infrastructure in addition to many other city services. The coordination of various Public Works projects such as stormwater improvements with roadway and streetscape improvements can be more cost efficient overall.

## Stormwater

Major storm drain pipes run along Hillwood Avenue and through a series of easements that bisect the South Washington Street POA. These are 48"-60" lines that meet just south of the Hillwood Avenue and South Washington Street Intersection. From there, a 72" line reaches into Fairfax County. Smaller storm drains throughout the South Washington Street POA are present for various properties and generally empty into one of these two main lines.

## Stormwater Improvements

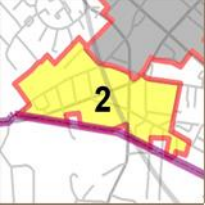
Since many properties have a number of storm drains on-site and easements for main lines, improvements will need to be incorporated into any redevelopment efforts. Many of the properties in the South Washington Street POA contain large amounts of impervious surface. Stormwater improvements may include reducing impervious

surface through the use of rain gardens and pervious paving. Additionally, green roofs may be an option on new buildings.

## Overhead Lines

Overhead utility lines should be undergrounded where possible. Currently, power, telephone, and cable lines within the South Washington Street POA are located overhead on wooden utility poles except in front of the Pearson Square/Tax Analyst complex. Street lights are located on lines strung over intersections attached to utility poles. Many of the poles are being affected by creep and the lines block visibility to aesthetic features, such as the façade of the Pearson Square building.

Of particular importance is the undergrounding of utilities along South Washington Street. This is the major corridor through the area, and therefore has the most influence on the perception of the South Washington Street Corridor POA as a whole. Placing these lines underground using CIP funds could be a City priority, with the funds later being recouped from developers as redevelopment occurs. TIF funds could also be used for utility undergrounding as part of new projects (See Chapter 7, Economic Development).



## South Washington Street Corridor Planning Opportunity Area 2

### Floodplain

The City's Resource Protection Area (RPA) and one-hundred year flood plain for Tripp's Run reach 60' and 100' into the South Washington Street POA at their deepest points, respectively. The area within the floodplain is located at the extreme southwestern part of the South Washington Street POA, near the intersection of South Maple Avenue and South Washington Street. Approximately two-thirds of the rainfall and the snow melt in the City drains into Tripp's Run, making it a very important watershed. This floodplain has been incorporated into public open space in the form of Cavalier Trail Park, and such incorporation into the fabric of the community is recommended for the portion of the floodplain in the South Washington Street Corridor POA. The current proposal for The Reserve at Tinner Hill utilizes this floodplain area as a public park and gateway feature.

### Leadership in Energy and Environmental Design (LEED)

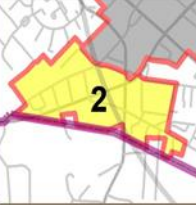
In order to promote environmentally sustainable conditions, it is recommended that new structures in the South Washington Street POA be eligible for Leadership in Energy and Environmental Design (LEED) certification. Developments that include

enough LEED elements to be eligible for certification should be given greater consideration during the plan review process. In addition, the City prefers that new commercial development meet at least LEED Silver certification.

Resolution 2012-24 establishes LEED Silver as the City standard for the construction and renovation of public facilities. This is applicable to the design and construction of any public project in the City, and is specifically relevant in the South Washington Street Corridor POA if the City pursues a community center project adjacent to Big Chimneys Park.



# South Washington Street Corridor Planning Opportunity Area 2



## South Washington Street

Existing  
Overhead  
Utilities

City of Falls Church



## Legend

0 75 150 225 300 Feet

- Stop Light
- Street Light (Utility Pole Mounted)
- Street Light (Freestanding)
- Transformer (Utility Pole Mounted)
- Utility Pole
- Overhead Lines (Pole to Pole)

## Inventory

### Type

- Stop Lights
- Street Lights (Utility Pole Mounted)
- Street Lights (Freestanding)
- Transformers (Utility Pole Mounted)
- Utility Poles
- Pole to Pole (Total Linear Distance)

### Amount

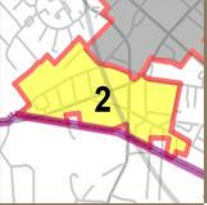
- 14
- 14
- 14
- 14
- 23
- 2,849 LF

## Methodology

Existing overhead utilities for South Washington Street were examined based on lines, utility poles, street lights, and stop lights along or immediately adjacent to the street and branch lines to Pearson Square and Tinner Hill.

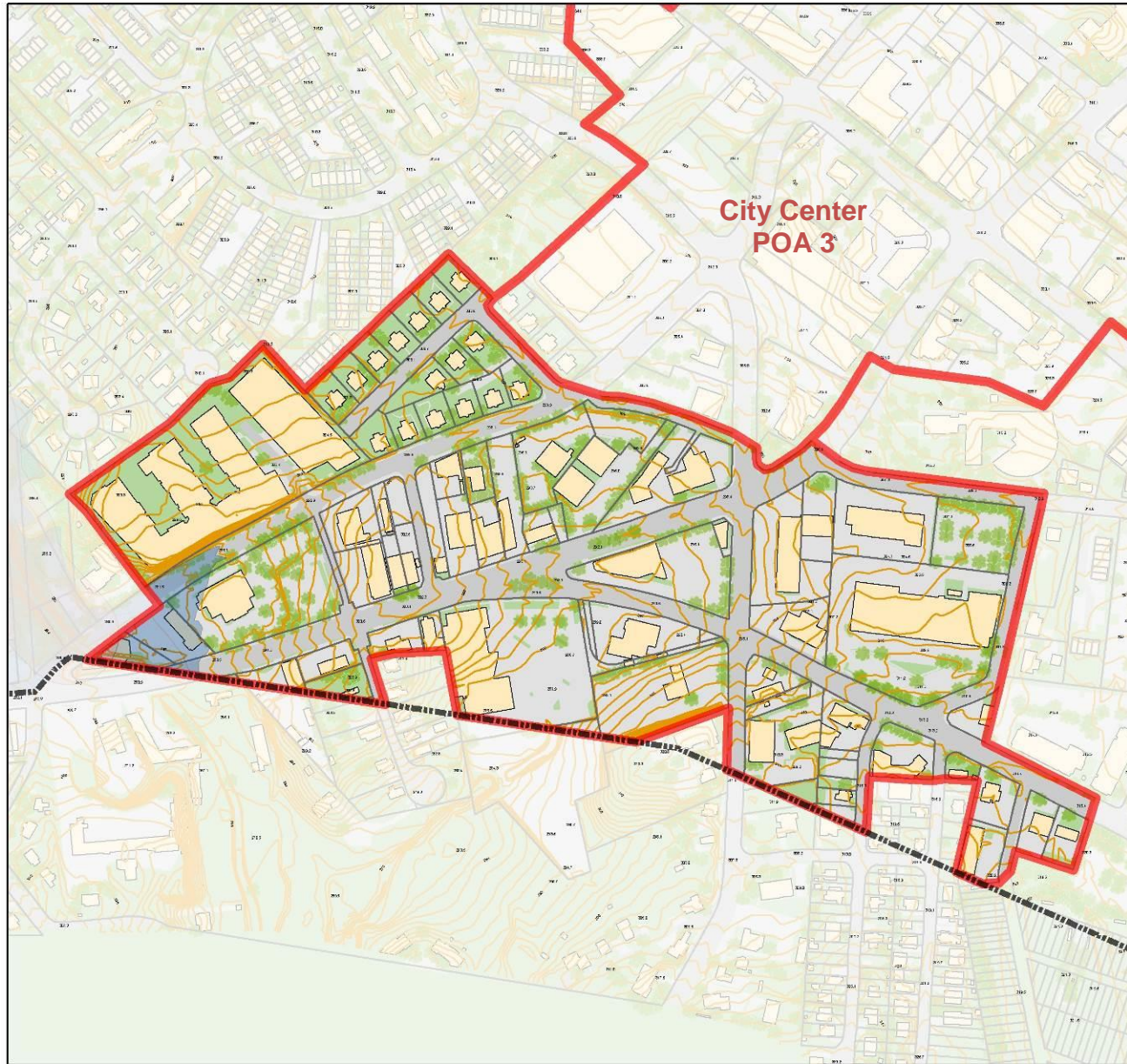
Stop Lights - Individual light heads  
Street Lights - Mounted and freestanding  
Transformers - Individual units  
Utility Poles - Individual wood poles  
Utility Lines - Shown simply as pole to pole connections. May represent multiple lines.





# South Washington Street Corridor Planning Opportunity Area 2

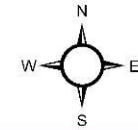
## Utilities & Environment



### Environment

**S Washington St  
Corridor**

**Planning  
Opportunity  
Area 2**



**City of  
Falls Church**

### Legend

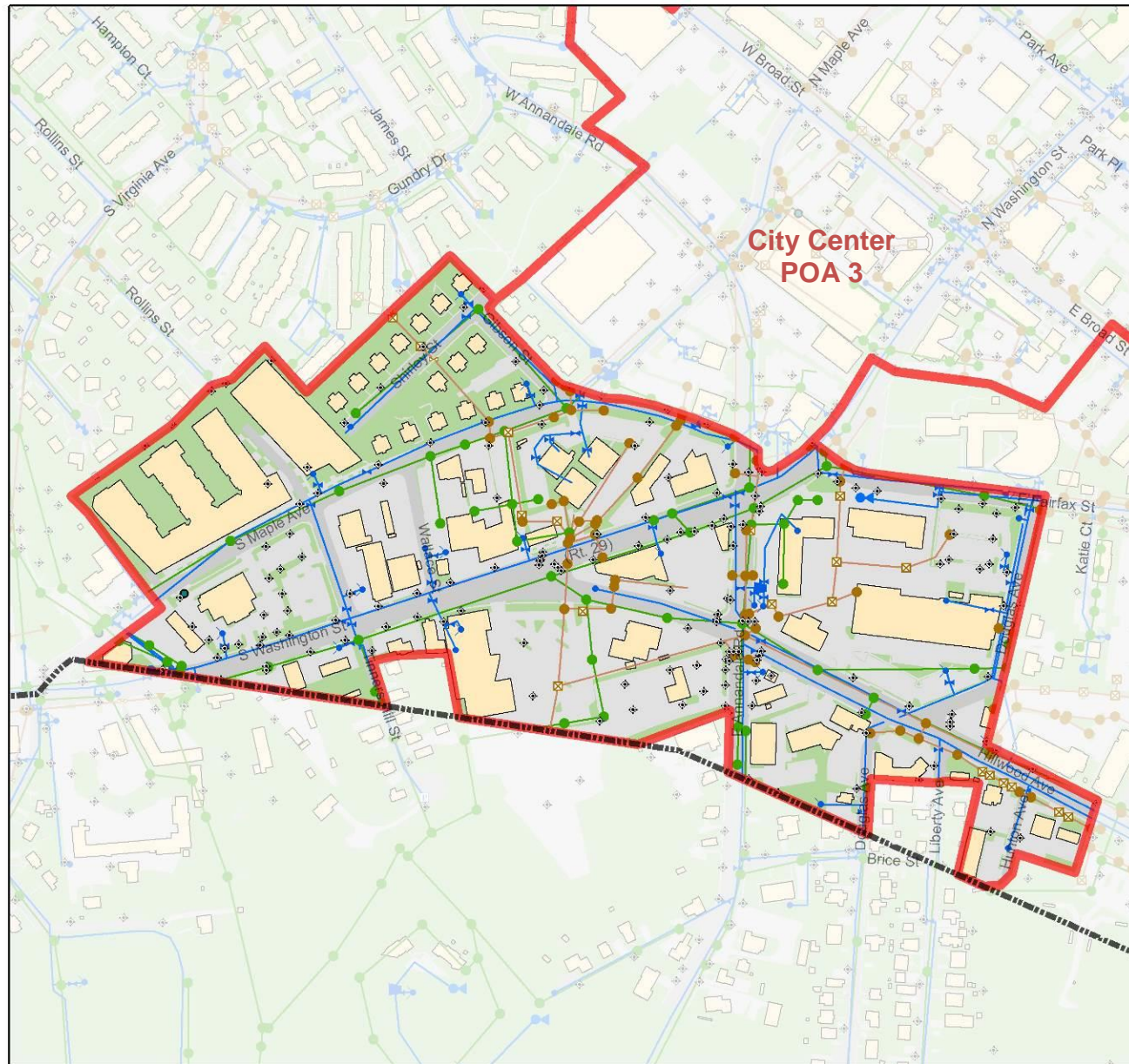
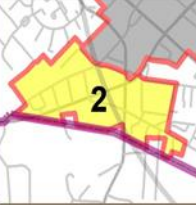
- Planning Opportunity Area
- Parcel
- City Boundary
- 100 Year Floodplain
- Resource Protection Area
- Contour Line (Height in Ft)
- Building
- Tree
- Water
- Pervious Surface
- Impervious Surface**
  - Roads
  - Other Impervious Surface



0 100 200 300 400  
Feet



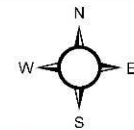
# South Washington Street Corridor Planning Opportunity Area 2



## Existing Utilities

### S Washington St Corridor

### Planning Opportunity Area 2



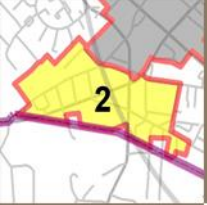
## City of Falls Church

### Legend

- City Boundary
  - Planning Opportunity Area
  - Building
  - Water
  - Utility
- | Water System      | Sanitary Sewer |
|-------------------|----------------|
| Air Release Valve | Sewer Line     |
| Blow Off Valve    | Manhole        |
| Check Valve       |                |
| Fire Hydrant      |                |
| Meter             |                |
| Plug              |                |
| Pump Station      |                |
| Reducer           |                |
| Separation Valve  |                |
| Tank              |                |
| Valve             |                |
| Water Line        |                |
|                   | Storm Sewer    |
|                   | Storm Pipe     |
|                   | Curb Inlet     |
|                   | Grate          |
|                   | Manhole        |
|                   | Pipe Inlet     |
|                   | Pipe Outlet    |



0 100 200 300 400 Feet



## South Washington Street Corridor *Planning Opportunity Area 2*

# Utilities & Environment

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